

AMENDMENT TO THE CLAIMS

1. (Currently Amended) A system comprising:

a first non-volatile data storage device, configured as one or more storage regions, to store one or more bytes of CMOS BIOS data, wherein the device lacks hardware security such that some of the CMOS BIOS regions are modifiable by an application program on the system;

another, second non-volatile data storage device to store a mirror image of the CMOS BIOS data in a location that cannot be modified without system authorization;

a program store to store one or more processor-readable instructions to ascertain the validity of the CMOS BIOS data stored in the first non-volatile storage device and if invalid to replace the CMOS BIOS data in the first non-volatile storage device with the stored mirror image of the data; and

a processing unit coupled to the first and second non-volatile data storage device devices and program store, to read and process the one or more instructions in the program store.

2. (Currently Amended) The system of claim 1 wherein the processing unit is configured to process the instructions in the program store as part of a start-up procedure.

3. (Currently Amended) The system of claim 1 wherein the program store is inside said another second non-volatile data storage device.

4. (Currently Amended) The system of claim 1 wherein the processor-readable instructions in the program store ascertain the validity of the data stored in the first non-volatile storage device on a region by region basis.

5. (Canceled).

6. (Currently Amended) The system of claim 5-4 wherein system authorization includes

employing a system interface to perform modifications to the data stored in said another second non-volatile data storage device.

7. (Currently Amended) The system of claim 1 wherein ascertaining the validity of the CMOS BIOS data stored in the first non-volatile storage device includes determining if the current data in the first non-volatile storage device is different than the stored image of the data.

8. (Currently Amended) The system of claim 1 wherein ascertaining the validity of the CMOS BIOS data stored in the first non-volatile storage device includes determining if an integrity metric corresponding to the current data in the first non-volatile storage device is different than the same integrity metric corresponding to the stored image of the data.

9. (Currently Amended) The system of claim 1 further comprising: generating a copy the current data in the first non-volatile storage device if an authorized application modifies the current data; and storing the copy as a valid image of the current data.

10. (Currently Amended) A method comprising: reading current CMOS BIOS content stored in a first non-volatile storage device of a system, wherein the first device lacks hardware security such that the CMOS BIOS content is modifiable by an application program in the system; reading from a valid image of the CMOS BIOS content, that is stored in a further, second non-volatile storage device; determining if the current content has been modified without authorization; and replacing the stored current content with said stored valid image of the content if the current content is determined to have been modified without authorization.

11. (Currently Amended) The method of claim 10 wherein the determining comprises: ~~reading the valid image of the CMOS BIOS content; and~~ comparing the read valid image to the current content to determine if the current content has been modified.

12. (Currently Amended) The method of claim 10 wherein determining if the current content has been modified without authorization includes

comparing a previously stored checksum, corresponding to the valid image of the content, and ~~the_a~~ checksum corresponding to the current content.

13. (Currently Amended) The method of claim 10 wherein determining if the current content has been modified without authorization includes

comparing a previously stored cyclic redundancy check value, corresponding to the valid image of the content, and ~~the_a~~ cyclic redundancy check value corresponding to the current content.

14. (Previously Presented) The method of claim 10 wherein determining if the current content has been modified without authorization includes

comparing a previously stored bit mask, corresponding to the valid image of the content, and a bit mask corresponding to the current content.

15. (Original) The method of claim 10 further comprising:
storing a valid image of the current content for later use.

16. (Currently Amended) The method of claim 10 wherein reading the current content is read from the first non-volatile storage device as is part of a start-up procedure of the system.

17. (Currently Amended) A method comprising:

arranging a first non-volatile storage device of a computer system into one or more storage regions to store CMOS BIOS data, wherein the device lacks hardware security such that some of the CMOS BIOS regions are modifiable by an application program in the system;

generating an integrity metric corresponding to valid CMOS BIOS content stored in a first region of the first non-volatile storage device; and

storing the integrity metric in another, second non-volatile storage device of the computer system to later determine if the content in the first region has been modified without authorization.

18. (Original) The method of claim 17 further comprising:

comparing a previously stored integrity metric, corresponding to an earlier version of the content stored in the first region, to a newly calculated integrity metric

corresponding to the current content stored in the first region to determine if an unauthorized modification has occurred.

19. (Currently Amended) The method of claim 17 further comprising:
replacing the content of the first region with an earlier version of the content
therein if it is determined that there was an unauthorized modification.

Claims 20-30 (Canceled).